Application Serial No. 09/073,748

King

6 including a definition of a fact table, at least one dimension, and a set of relations between the

fact table and the at least one dimension that corresponds to a star schema, the definition further

defining a set of operations for manipulating the data, the set of operations defining programs

9 that operate on the set of tables and the set of table columns; and

the computer using the definition to generate the set of tables.

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5. (Amended) The method of claim 1 wherein the set of tables includes a first table and a

second table, and wherein the first table includes one or more columns from the second table, and

wherein said one or more columns are automatically populated [from the one or more columns].

1 21. (Amended)

A system comprising:

a database şystem;

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- a first program for accessing a definition of the schema for the database system, the
- 4 schema defining a set of tables, a set of columns corresponding to the set of tables, and a set of
- 5 relationships between the tables of the set of tables, the schema further including a definition of a
- 6 fact table, at least one dimension, and a set of relations between the fact table and the at least one
- 7 dimension that corresponds to a star schema, the definition further defining a set of operations for
- 8 manipulating the data, the set of operations defining programs that operate on the set of tables
- 9 and the set of table columns, the first program further for using the definition to generate the
- set of tables.

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(Amended) A system comprising:

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- means for accessing a definition of the system, the definition defining a schema for use by
- 3 the system, the schema defining a set of tables, a set of columns corresponding to the set of
- 4 tables, and a set of relationships between the tables of the set of tables, the schema further

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5 including a definition of a fact table, at least one dimension, and a set of relations between the

fact table and the at least one dimension that corresponds to a star schema, the definition further

defining a set of operations for manipulating the data, the set of operations defining programs

8 that operate on the set of tables and the set of table columns; and

means for using the definition to generate the set of tables.

1 38. (Amended) [A computer program product comprising] A computer readable medium

2 containing executable instructions which, when executed in a processing system, causes the

system to create a system for creating a well-formed database system, wherein creating

4 comprises:

[a memory medium; and]

6 [a computer program stored on the memory medium, the computer program comprising

instructions for] accessing a definition of a system, the definition defining a schema for use by

the system, the schema defining a set of tables, a set of columns corresponding to the set of

tables, and a set of relationships between the tables of the set of tables, the schema further

including a definition of a fact table, at least one dimension, and a set of relations between the

fact table and the at least one dimension that corresponds to a star schema, the definition further

defining a set of operations for manipulating the data, the set of operations defining programs

that operate on the set of tables and the set of table columns[, and instructions for]; and

using the definition to generate the set of tables.

1 39. (Amended) The [computer program product] computer readable medium of claim 38

2 wherein the set of tables includes a first table and a second table, wherein the first table includes

- 3 \a first column, wherein the second table includes a second column, and wherein the first column
- 4 and the second column are related by a join and are therefore guaranteed to be from the same
- 5 domain.
- 1 40. (Amended) The [computer program product] computer readable medium of claim 38
- 2 wherein the set of tables includes a first table and a second table, and wherein the definition
- defines that the first table relates to the second table by a many to one relationship, and wherein
- 4 the generating the set of tables includes automatically generating a foreign key column in the first
- 5 table, wherein the foreign key column is for holding a foreign key to the second table.
- 1 41. (Amended) The [computer program product] computer readable medium of claim 38
- wherein the set of table includes a first table and a second table, and wherein the definition
- defines that the first table relates to the second table by a many to many relationship, and wherein
- 4 the generating the set of tables includes automatically generating an associative table
- 5 corresponding to the first table and the second table, and wherein the associative table has a
- 6 unique value created for each unique many-to-many relationship between the first table and the
- 7 second table.
- 1 42. (Amended) The [computer program product] computer readable medium of claim 38
- wherein the set of tables includes a first table and a second table, and wherein the first table
- 3 includes one or more columns from the second table, and wherein said one or more columns are
- 4 automatically populated from the one or more columns.
- 1 43. (Amended) [A computer data signal embodied in a carrier wave comprising] An
- 2 electromagnetic medium containing executable instructions which, when executed in a
- 3 processing system, causes the system to create a system for creating a well-formed database
- 4 system, wherein creating comprises:
- 5 [a computer program, the computer program comprising instructions for] accessing a
- 6 definition of a system, the definition defining a schema for use by the system, the schema



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7 defining a set of tables, a set of columns corresponding to the set of tables, and a set of

8 relationships between the tables of the set of tables, the schema further including a definition of a

fact table, at least one dimension, and a set of relations between the fact table and the at least one

dimension that corresponds to a star schema, the definition further defining a set of operations for

manipulating the data, the set of operations defining programs that operate on the set of tables

and the set of table columns[, and instructions for]; and

using the definition to generate the set of tables.

1 44. (Amended) The [computer data signal embodied in the carrier wave] electromagnetic

2 <u>medium</u> of claim 43 wherein the set of tables includes a first table and a second table, wherein

3 the first table includes a first column, wherein the second table includes a second column, and

4 wherein the first column and the second column are related by a join and are therefore guaranteed

5 to be from the same domain.

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1 45. (Amended) The [computer data signal embodied in the carrier wave] electromagnetic

2 medium of claim 43 wherein the set of tables includes a first table and a second table, and

3 wherein the definition defines that the first table relates to the second table by a many to one

relationship, and wherein the generating the set of tables includes automatically generating a

foreign key column in the first table, wherein the foreign key column is for holding a foreign key

6 to the second table.

1 46. (Amended) The [computer data signal embodied in the carrier wave] electromagnetic

2 medium of claim 43 wherein the set of tables includes a first table and a second table, and

3 wherein the definition defines that the first table relates to the second table by a many to many

4 relationship, and wherein the generating the set of tables includes automatically generating an

5 associative table corresponding to the first table and the second table, and wherein the associative

6 table has a unique value created for each unique many-to-many relationship between the first

7 table and the second table.

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47. (Amended) The [computer data signal embodied in the carrier wave] electromagnetic medium of claim 43 wherein the set of tables includes a first table and a second table, and wherein the first table includes one or more columns from the second table, and wherein said one

or more columns are automatically populated from the one or more columns.